

A STUDY OF THE GENUS *SILLYBIPHORA* KUZNETSOV (LEPIDOPTERA, TORTRICIDAE, OLETHREUTINAE)

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Abstract Two species of the genus *Sillybiphora* Kuznetsov, 1964 are reported from China, including one new species, *S. pauliprotuberans* sp. nov. Photographs of the adults and the genitalia are provided, and a key for the identification of the species in the genus is given.

Key words Lepidoptera, Tortricidae, Olethreutinae, *Sillybiphora*, new species, China.

The genus *Sillybiphora* was erected by Kuznetsov in 1964 with *S. devia* (Kuznetsov) as the type species. To date it includes only one species (Brown, 2005), which was previously recorded in China (Kuznetsov, 2001; Liu & Li, 2002). In this paper we describe one new species, *S. pauliprotuberans* sp. nov. based on the specimens collected from Yunnan Province. All the studied specimens are deposited in the Insect Collection, College of Life Sciences, Nankai University, Tianjin, China.

Sillybiphora Kuznetsov, 1964

Sillybiphora Kuznetsov, 1964: 886; Razowski, 1989: 187; 1999: 489; Kuznetsov, 2001: 299; Liu & Li, 2002: 369. Type species: *Sillybiphora devia* Kuznetsov, 1964.

Diagnosis. The genus *Sillybiphora* is closely related to *Ancylis* Hübner [1825] in the male genitalia, but can be distinguished from the latter by the forewing lacking a falcate or elongate apex and the signum horned. In *Ancylis*, the forewing has a falcate or elongate apex; and the signum is flattened with a blade-shaped termination. It is also similar to *Pseudacrodita* Oku, 1979 in the male genitalia, but can be recognized by the slender subrectangular cucullus, the obtuse apex and the indistinct neck of the valva; in *Pseudacrodita*, the cucullus is broadly subtriangular; the apex is acute; and the neck is distinct.

Key to the species of *Sillybiphora* Kuznetsov based on the male genitalia

1. Basal patch indistinct, indicated by dark brown streaks and spots; sacculus with a small protrusion at subapex, length of the protrusion 1/10 width of the basal cavity; cucullus with apex globularly expanded *S. pauliprotuberans* sp. nov.
Basal patch distinct, dark brown, circular in shape; sacculus with a large protrusion at apex, length of the protrusion equal to width of the basal cavity; cucullus with apex not expanded *S. devia* Kuznetsov

Sillybiphora pauliprotuberans sp. nov. (Figs. 1, 3)

Adult (Fig. 1). Wing expanse 12.5-14.0 mm. Vertex, frons and antenna brownish. Labial palpus grayish white; second segment with long scales; third

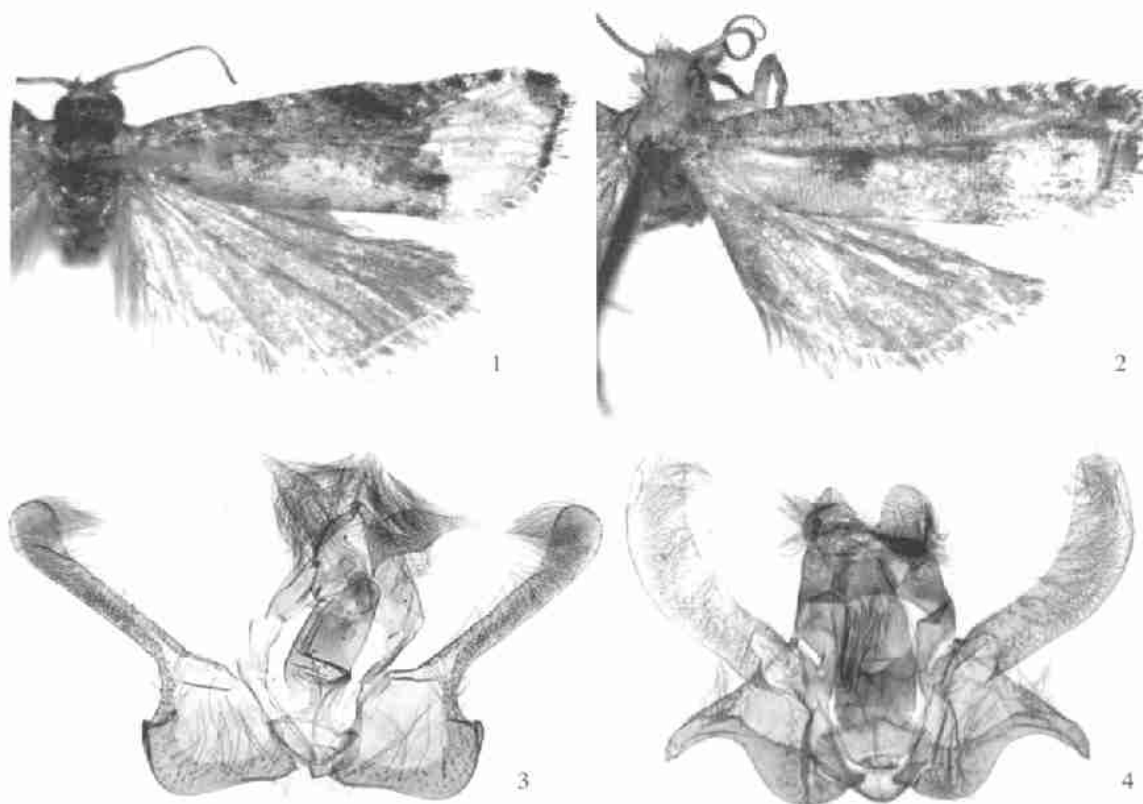
segment shorter than second, slightly drooping. Thorax dark brown. Tegula grayish white. Forewing with upperside ground color grayish brown, apex and tornus grayish white; pattern elements including indistinct fasciae and white costal strigulae; basal patch indistinct, formed by dark brown streaks and spots; postmedian fascia dark brown; terminal patch grayish white, suboval and large, equal to width of the forewing; costa with nine strigulae from base to R_4 ; each strigula with a gray silvery stria extending obliquely; strigulae one to four distributed between base of the wing and the point where Sc meets costa; pairs of strigulae one and two occupying interfascial position, between basal and subbasal fascia, situated before 1/5 forewing length, striae rarely extending beyond Sc; pairs of strigulae three and four occupying interfascial position between subbasal and median fascia, with striae extending backward to 1/3 forewing length of costa and midwing, respectively; strigulae five and six approximate at distal margin of median fascia, appearing as a single paired strigula; striae from them extending obliquely to 1/3 forewing length of costa, broken by fuscous spots; the distal three pairs distributed between pairs of veins R_1 - R_2 , R_2 - R_3 and R_3 - R_4 , respectively; striae arising from them often becoming confluent, and extending obliquely to termen between R_5 and M_1 ; cilia grayish brown intermitted with white; underside brown. Hindwing with upperside ground and cilia dark gray; underside grayish. Fore leg dark brown, tarsus intermitted with white; mid and hind legs yellowish, tarsi intermitted with brown. Abdomen grayish brown.

Male genitalia (Fig. 3). Uncus atrophied. Socius broad, setose, basal half subrectangular, apical half lobe-shaped. Valva long and narrow; broad at base, subrectangular; basal cavity large; sacculus with a small protrusion at subapex; neck indistinct; cucullus long and narrow, densely bristled, globularly expanded apically.

The research was supported by the National Natural Science Foundation of China for the Special Program 2007-2009.

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Received 2 Mar. 2007, accepted 20 Apr. 2007.



Figs. 1-4. *Sillybiphora* spp. 1-2. Adults. 1. *S. pauliprotuberans* sp. nov. 2. *S. devia* Kuznetsov. 3-4. Male genitalia. 3. *S. pauliprotuberans* sp. nov. 4. *S. devia* Kuznetsov.

Aedeagus broad, 1/2 width of tegumen; cornuti consisting of many deciduous spines.

Female. Unknown.

Type material. Holotype ♂, Lijiang (26°52'N, 100°14'E; alt. 2 650 m), Yunnan Province, 17 July 2001, coll. LI Hou-Hun, WANG Xin-Pu, genitalia slide no. YHL0052. Paratypes: 7 ♂♂, same data as holotype.

Distribution. China (Yunnan).

Diagnosis. This species is similar to *S. devia* (Kuznetsov) in the male genitalia, but can be differentiated from it by the basal patch indistinct, formed by dark brown streaks and spots; the terminal patch suboval and large, equal to width of the forewing; the sacculus with a small protrusion at subapex, length of which is 1/10 × width of the basal cavity, and the cucullus with apex expanded globularly. In the latter species, the basal patch is distinct, circular and dark brown; the terminal patch is circular and small, 2/3 width of the forewing; the sacculus has a large protrusion at apex, length of which is equal to width of the basal cavity; and the cucullus is equal in width from base to apex.

Etymology. The specific name is derived from the Latin prefix “paul-” meaning small, and protuberans meaning protrusion, referring to the sacculus with a small protrusion.

Sillybiphora devia Kuznetsov, 1964 (Figs. 2, 4)

Sillybiphora devia Kuznetsov, 1964: 887; Razowski, 1989: 187; Byun et al., 1998: 178; Razowski, 1999: 489; Kuznetsov, 2001: 301; Liu & Li, 2002: 369.

Adult (Fig. 2). Wing expanse 10.0-13.0 mm.

Male genitalia as shown in Fig. 4.

Material examined. 1 ♂, Wufeng County, Hubei Province, 1 100 m, 11 July 1999, coll. LI Hou-Hun; 2 ♂♂, Yuexi County, Anhui Province, 22 Aug. 1995, coll. HU Xiang-Fu; 1 ♂, Neixiang County, Henan Province, 650 m, 11 July 1998, coll. LI Hou-Hun.

Distribution. China (Anhui, Henan, Hubei, Jiangxi, Northeastern), Japan, Russia.

Remarks. This species is similar to *S. pauliprotuberans* sp. nov. in the male genitalia. The differences between them are stated under the description of the new species.

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原小卷蛾属分类研究（鳞翅目，卷蛾科，新小卷蛾亚科）*

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摘 要 原小卷蛾属 *Sillybiphora* Kuznetsov 目前全世界仅知 1 种，中国已有记载。记述 2 种，包括 1 新种：微凸原小卷蛾 *S. pauliprotuberans* sp. nov.。文中给出了原小卷蛾属的分种检索表，提供了成虫图及外生殖器特征图。研究标本均保存在南开大学生命科学学院昆虫标本室。

新种与庐原小卷蛾 *S. devia* (Kuznetsov) 在雄性外生殖器上相似，两者的主要区别是：新种基斑不明显，散布黑褐色

条纹和斑点；端斑椭圆形且大，长与前翅宽约等宽；抱器腹近端部有一小的凸起，约为抱器瓣基部洞穴宽的 1/10；抱器端部膨大呈球状。庐原小卷蛾 *S. devia* (Kuznetsov) 基斑明显，黑褐色圆斑；端斑圆形且小，长约为前翅宽的 2/3；抱器腹近端部有一大的凸起，与抱器瓣基部洞穴约等宽；抱器端部无明显膨大，从基部到端部约等宽。

关键词 鳞翅目，卷蛾科，新小卷蛾亚科，原小卷蛾属，新种，中国。

中图分类号 Q969.42

国家自然科学基金特殊学科点项目资助。

* 本文为庆祝郑哲民教授 75 华诞暨执教 55 周年而作。

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